MATERIAL SAFTEY DATA SHEET

MATCHES, SAFETY (BOOK OR STIRKE ON BOX)

INFLAMMABLE SOLIDS

UNIFLAME, INC.

SECTION 1- CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Code/Identity: 247784

Revision Date: 6/8/01

Customer part #/Name: Not Applicable

Product Trade Name: 11" Matches

Chemical Family: Sulfate

Technical Information: 1-800-762-1142

Product Safety/MSDS Information: 1817 N. Kenosha Rd.

Zion, IL 60099

(847) 731-8643

Date of Preparation: 6/6/01

PRIMARY HAZARD WARNING

Hard dash or friction may cause inflammation. Prolonged exposure to burning of large quantity (accidental fire or explosion) can cause carbon monoxide poisoning, oxygen deficiency, and suffocation caused by exceeded carbon dioxide.

This product is subject to inflammation when contaminated by oxide or exposed to external fire resources including electric welding, electric spark, oxygen welding, electric fire, etc..

When used near flammable materials, such as oils, liquid gas, this product may cause conflagration or injury to body.

Children are forbidden to use in order to avoid conflagration and injury incase of misusage.

SECTION 2- COMPOSITION/INFORMATION ON INGREDIENTS

REF HAZARDOUS INGREGIENTS PERCENT

001 Potassium Chlorate 51.8

002 Sulfur 7.6

003 Gelatin 11.2

004 Silica 18.8

005 Aluminum Oxide/Ferric Oxide 3.9

006 Calcium Oxide 5.9

007 Pigment 0.8

** Hazardous Ingredients: Sulfur 7.6%

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES ACT

All chemical substances in this product are listed on the U.S. TSCA inventory or are otherwise approved for unrestricted commercial use under TSCA.

SECTION 3 – HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

INGESTION: Harmful if swallowed.

EYE CONTACT: Causes eye irritation.

INHALATION: Vapor and or Smoke made be harmful if inhaled for long periods of time.

CHRONIC EXPOSURE: Avoid long term exposure to ignited match. This match contains sulfate. Long term exposure to sulfate in extreme conditions) accidental fire or explosion) can lead to carbon monoxide poisoning, oxygen deficiency, and or suffocation Application of this product is not expected to generate excess exposure.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: None Known

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not Applicable.

SECTION 4 - FIRST AID MEASURES

INGESTION: If swallowed, do not induce vomiting. Gently wipe out inside of mouth to remove any residue material.

EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.

SKIN BURN: In case of light burn, flush immediately with water for at least 15 minutes followed by washing with soap and water. In case of severe burns contact an emergency room or physician immediately

INHALATION: If affected by inhalation of vapor or smoke, remove to fresh air. Apply artificial respiration and other support measures as necessary.

OTHER: If overexposure or conflagration occurs, contact fire department and emergency room immediately. Have Material Safety Data Sheet available.

SECTION 5 – FIRE FIGHTING MEASURES

FLASHPOINT: 375F; 191C

EXTINGUSHING MEDIA: Use water or extinguisher appropriates for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Use of this product near combustible material can cause this to occur.

SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers that are exposed to extreme heat. If water is used, fog nozzles are preferable. Incase of explosion or conflagration fire fighters should use self-contained breathing apparatus and full protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURE

STEPS IN CASE OF ACCIDENTAL FIRE OR BREAKAGE OR SCATTERED MATCHES:

Inflammation may be caused due to dash, or strike during handling or storage. If a single package (outer packing carton) is on fire, it should be immediately separated from other packages at once, and then put out the fire with water or extinguisher. If other packages or inflammable materials have been inflamed, put the fire out with extinguisher and evacuate persons at same time. In case of conflagration or explosion immediately contact fire department.

If exposure of match heads and phosphorous paper is found when you open the inner packaging or during handling, clearing must be done. Separate the broken phosphorous paper, oxide, inflammable material, and fire source. If breakage is in small quantity, they can be burnt out in a tank. If the quantity is large, consult local fire control department for proper disposal in accordance with local environmental regulations.

SECTION 7 - HANDLING & STORAGE

HANDLING AND STORAGE PRECAUTIONS: Protect from open flames. Storehouse should be dry and well ventilated. Do not store near other combustible material or within 30 meters of open flame. Store in stacks of no more than 500 cartons each. A fireproof span of at least 1.5 meters must be kept between stacks. The distance between each stack top and storehouse ceiling must be at least 1 meter. Proper fire extinguishers should be installed near storage area.

OTHER PRECAUTIONS: During transport these goods must ship as hazardous materials in accordance with all applicable federal guidelines.

IMO: Proper Shipping Name: Matches, Safety (Book, card, or Strike on Box)

IMO: UN# 1944

DOT: Class 4.1

DOT: Label Flammable Solid

IATA: Package Group III

SECTION 8 - EXPOSURE CONTROLS 7 PERSONAL PROTECTION

PERSONAL PROTECTION: Always strike matches away from eyes, skin, or hair and away from combustible materials. Minor s should not use this product.

SECTION 9 - STABILITY AND REACTIVITY

This product is normally stable and will not undergo hazardous reactions.

INCOMPATIBLITY: Avoid contact with alkalies, acids, gases, and other combustible material.

This is the end of the MSDS for 247784